

Title (en)  
Digital radio communication system and method with adaptive modulation

Title (de)  
Digitales Funkübertragungssystem und Verfahren mit adaptiver Modulation

Title (fr)  
Système et méthode numérique de radio-transmission avec modulation adaptative

Publication  
**EP 1128586 A3 20060531 (EN)**

Application  
**EP 01104308 A 20010222**

Priority  
• JP 2000048856 A 20000225  
• JP 2000320627 A 20001020

Abstract (en)  
[origin: EP1128586A2] QPSK modulated quadrature baseband signal generating section 301 generates a QPSK modulated quadrature baseband signal. 8PSK modulated quadrature baseband signal generating section 302 generates an 8PSK modulated quadrature baseband signal. Based on the modulation scheme determined information, in-phase component switching section 304 and quadrature component switching section 305 switch between the QPSK modulated quadrature baseband signal, 8PSK modulated quadrature baseband signal and pilot symbol to output to radio section 306. Radio section 306 performs the predetermined radio processing on the baseband signal to output a transmission signal. The transmission signal is amplified in power amplifier 307, and the amplified transmission signal is transmitted from transmission antenna 309. It is thereby possible to take into account both the improvement in the data transmission rate, and the benefit and convenience in terminals.

IPC 8 full level  
**H03C 5/00** (2006.01); **H04L 1/00** (2006.01); **H04B 7/26** (2006.01); **H04J 3/00** (2006.01); **H04J 11/00** (2006.01); **H04L 27/18** (2006.01); **H04L 27/26** (2006.01); **H04L 27/34** (2006.01)

CPC (source: EP US)  
**H04L 1/0025** (2013.01 - EP US); **H04L 27/26** (2013.01 - EP US); **H04L 27/34** (2013.01 - EP US)

Citation (search report)  
• [X] EP 0869647 A2 19981007 - LUCENT TECHNOLOGIES INC [US]  
• [X] KAMIO Y ET AL: "Performance of modulation-level-controlled adaptive-modulation under limited transmission delay time for land mobile communications", VEHICULAR TECHNOLOGY CONFERENCE, 1995 IEEE 45TH CHICAGO, IL, USA 25-28 JULY 1995, NEW YORK, NY, USA, IEEE, US, vol. 1, 25 July 1995 (1995-07-25), pages 221 - 225, XP010166927, ISBN: 0-7803-2742-X  
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**EP 1128586 A2 20010829; EP 1128586 A3 20060531; EP 1128586 B1 20120822**; CN 100490367 C 20090520; CN 101534286 A 20090916; CN 101534286 B 20111116; CN 1310558 A 20010829; EP 2264933 A2 20101222; EP 2264933 A3 20170517; EP 2264933 B1 20180905; EP 2264934 A2 20101222; EP 2264934 A3 20170517; EP 2264934 B1 20180905; JP 2001313685 A 20011109; JP 4409743 B2 20100203; US 2001017896 A1 20010830; US 6985538 B2 20060110

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**EP 01104308 A 20010222**; CN 01104763 A 20010223; CN 200910134774 A 20010223; EP 10012300 A 20010222; EP 10012301 A 20010222; JP 2000320627 A 20001020; US 78962301 A 20010222